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THE FARMERS' CABINET,

DEVOTED TO AGRICULTURE, HORTICULTURE AND RURAL ECONOMY.

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For the Farmers' Cabinet.

Raising Chickens.

Auburn, Frederick Co Md, Nov. 23d, 1837.

I very much fear you will begin to think me either an epicure or the son of an epicure, it being only a short time since that I served you up a mess of bacon, and now come with a dish of fowl. It has been said it is not good for man to be alone. Bacon, although good alone, is very much better when accompanied with a good round fat pullet. But it is not a pullet that I am about to serve up to you at present, but her brother, though in an altered form, as you will learn in the sequel. It is a fact known to every traveler, that there is no dish presented before him half so often as that of chicken, served up in every form of which it is capable, broiled, fryed, stewed, baked, or boiled, and it is a fact equally well known that there is no dish so often turned away untasted, in consequence of its disgusting appearance or bad culinary preparations. I allude of course to such as we too frequently meet with on our public tables and watering places, (Bedford itself not excepted.) How often is the ears of the hungry and weary traveler assailed the moment the stage draws up to the inn, by the dieing shrieks of the rooster that had but the moment before been picking a scanty subsistence from the dunghill, and in a few moments more graces the head of the table, looking more like that well known waterfowl vulgarly called a fly-up-the-creek, who is indebted alone to the length of his legs and neck for a subsistence, than what it really is. But I have promised to give you something even better than a fat pullet, and I shall now proceed to serve it up; I mean then that favorite dish of the ancient Romans, the "Gallas Spads or Capon," or more plainly the cock altered by castration, and in such high repute was it that it generally graced the board of that most excellent judge of good eating, Lucullus, and if Shakespeare is to be believed, it was a tit bit not only with Jack Falstaff, but with the Justice who is represented—"In fair round body with good capon lin'd." In England, at the present day, at every respectable eating house the first thing that greets the eye of the traveler and heads the bill of fare, is a capon, either boiled or baked. In France they are made doubly useful, not only as an article of food, but a means of production; if I may be allowed the expression they are used as a foster mother for raising chickens, which they do much better than the hen, owing to the large size and thick coat of feathers. The poulterers use a considerable number of them for this purpose,—the moment the hen has hatched her brood they are given to the capon who rears them with all the care of the mother, the hen is cooped and well fed until she gains her flesh and strength and then turned out to lay and set again; in this way the poulterer is enabled to raise a large number of chickens from half the number of hens.—The capon at market sells higher than any of our domestic fowls. What is the reason then in our country where good living is so highly prized, the capon is seldom or never seen? Should you travel from Maine to New Orleans, you would probably never have this question put to you at table, "Sir, shall I help you to a fine piece of capon." I would by no means attribute this neglect of one of the finest dishes in the world to obtuseness of palate, but rather to a want of the necessary information as to the manner of performing the operation on the cock. To obviate this I will subjoin directions, by the observance of which a man of common adroitness can make two dozen capons in an hour. Lay the chicken before you on his left side, with his head towards your right hand, let an assistant hold

him by his head and legs extended; with a sharp knife make a transverse incision of one and a half inches or more in the side just below the ribs. Insert the fore finger, and near the middle of the body, at the distance of about three quarters of an inch from the incision, near the spine, will be found the testicles, which may very easily be removed by the thumb and finger; sew up the orifice and daub a little tar over it to keep off the flies. Care should be taken in cutting through the several integuments lest the viscera be wounded.—The cock should be about half grown. Not one in a hundred will die if the operation be properly performed. After a fair trial both of the bacon and the capon, should you relish them, I may be induced at some future time to serve you up some other dish, which I only hope may be found as agreeable to your numerous readers as was the long and learned dissertation we had some time since upon Hollow Horns.

With my best wishes,
I am respectfully your obt. Serv't,
J. W. J.

For the Farmer's Cabinet.

Remarks upon Farm Buildings.

THE ATMOSPHERE WITHIN A DWELLING HOUSE.

The objects of importance in a dwelling house are a pure and comfortable atmosphere, and so arranged as to procure this, and other necessary comforts for the inmates, with the least possible labor and expense. There appears to be in many houses two grand errors, in regard to the air; these are the want of uniform purity and temperature, where attempts are made to economise, or lessen the usual quantity of fuel; and it is for the purpose of finding a remedy for these, that the following remarks are submitted to the readers of the Cabinet, with a request that if any of them know of any better plan, after a trial of this, such will be published through the same channel. The plan is this, viz., suppose a ten plate stove, or a Franklin, or indeed any other stove, with doors to open or close at pleasure, so as to suffer no air to pass up the chimney while the fire is burning, except what passes through the fire; place this stove with the back, (or part farthest from the door,) next to one of the sides of the apartments intended to be warmed, and within one or two inches of the (outer) wall; but previously to its being so placed, one half or more of the stove is partially surrounded with a kind of casing of sheet iron, made two inches in diameter, or square, greater than that of the stove, with a tube three or four inches diameter, (or other dimensions,) riveted to the middle; this tube passes horizontally through the wall to the outside of the building, and the side to which it is riveted presses against the inner side of the wall, and the other parts surround one half, or more of the stove, within one inch of it; this casing is supported by the tube which fits closely to the opening in the wall, so as to admit no air into the apartment but such as passes through the tube itself. The stove is supported by three legs, or four; two of them under the front part, or hearth, in the usual manner, and the other *one* or *two* pass up through a hole or holes of the same diameter, in the lower side of the casing; the tube should have a valve to turn upon a pivot or fulcrum, at opposite sides of the tube, so as to close it by being placed across at right angles, and thus exclude the air from passing into the apartment around the stove; but when it is placed (or turned) in a line with the tube, air is admitted freely, in consequence of its being made so thin as to occupy but little of the diameter, or cross section of the tube; the valve should have an iron rod attached to it by a joint or fulcrum, and extend into the apartment, and so formed as to enable a person to confine the valve at pleasure at any position between a right angle and a line parallel with the tube; the valve should be composed of a bad conducter of heat, and possess other suitable properties. The operation is as follows, viz., the fire and fuel are placed in the stove, and the valve opened to any required extent; the *current of air* inward through the tube, and casing around the stove increases as the degree of *heat increases* in the stove; and as this air passes through the casing, it becomes sufficiently heated, and is as pure, perhaps, as possible for air to be when heated by artificial means, and by placing a tin or iron vessel of water on the stove, sufficiently broad and shallow, a degree of humidity may be given to the atmosphere of the apartment, equal to that caused by the sun's rays to the atmosphere generally. No air, (except through the said tube) should be admitted into the apartment.

In this manner, each apartment of a house may be heated by thus placing a stove in each; but in the latitude and climate of Pennsylvania, perhaps one stove of proper dimensions, placed in one of the apartments of the first story, above the cellar, would answer to warm sufficiently the other apartments of the same story, and that immediately above, of an ordinary sized house, except the kitchen, which should have a cooking stove, supplied with air on the aforesaid principle, but varied to suit the peculiar construction of the stove, a drum from the pipe of the cooking stove, where convenient, might assist to warm part of the upper story, but the atmosphere of the kitchen apartment, should be excluded as much as possible, from the other apartments.

Each out door of a house should have, during the winter season, a temporary door accompanying it, with the upper half composed of sash and glass, placed at a distance within the house, rather more than the width of the outer door, and both of them constructed so as to admit the least quantity of air when they are closed. The windows, and the whole outer surface of the house should also be constructed so as to admit no air except when desired, and then only at the top of the respective windows. Each stove pipe should have a damper or valve, similar to that in the tube already described, and made to turn on pivots or fulcrums, so as to close the passage of the pipe to any required degree. The top of each chimney should have an arched, or other covering, to exclude the rain from the flue, but so formed as to permit the smoke to pass off freely. Each flue should have a damper or valve, to open and close to any required degree.

Fig. 1.

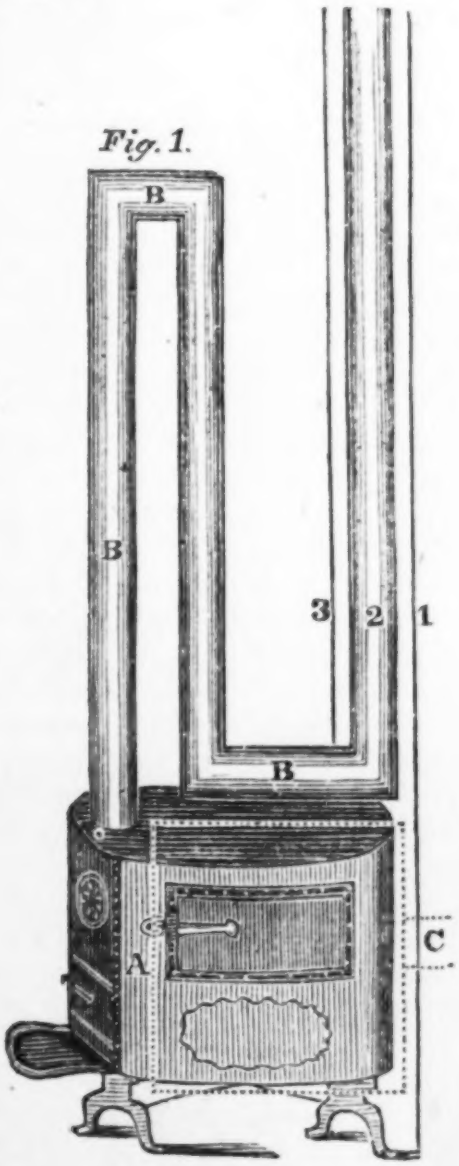

Fig. 24.

A, fig. 1, elevation or vertical projection of a side view of a stove. BBB, ditto. of pipe. C, the end of the horizontal flue or tube, at the outside of the building; the dotted lines show the position of the top, bottom, and two ends of the sheet iron casing, and the tube, 1, shows a section of the outer wall, opposite to the flue of a chimney. 2, shows a section of a chimney flue. 3, shows a section of the inner wall, opposite to chimney flue.

The cut represents a ten plate stove, with the casing placed partly under the arch of a common fire place, and the flue of the chimney; and another part extending beyond the breast, or inner wall of the flue from the fire place into the apartment; and the stove pipe is represented as passing up near the ceiling, and down below the arch of the fire place, so as to discharge the smoke from the stove at the lower end of the chimney flue. The lower end of the pipe may be connected with a piece of sheet iron, bent at right angles, and placed below and around the end of the pipe in such a manner as to prevent the passage of any air up the chimney, except what goes through the pipe. The tube from the casing, passes out of the apartment through the back wall of the fire place, and fits so closely to the wall, as to admit no air into the apartment, except what enters through the tube itself. I have represented this in a fire place, because that is the most convenient situation in houses already built, but they can be placed at any other convenient place, and any other kind of a stove used, by making the casing and tube of a suitable form and dimensions.

P.

November 21st, 1837.

We find the following highly interesting observations on insects, with a view to arrest their destructive ravages, in a paper read before the Agricultural Society of Bucks county, some years since, by James Worth, Esq. The subject is one of vast interest to agriculturists, and we ask for this paper that attentive perusal and consideration that its importance demands.

Observations on Insects.

BY JAMES WORTH.

Entomology, or the science of insects, is, I believe, admitted to be very defective in its most essential part; that is, an acquaintance with the habits of insects. It is with insects as it is with man and all other things in nature: it is their use, or works, or character, that is the primary object. What care we for the portrait of a man, unless for some great or good work that he has done, or the relation in which he stands to us? The print respecting the celebrated English Ox, is indeed a valuable print, but it is only valuable as it shows the essential points of a breed of cattle most easily fattened, and yielding beef of the finest quality. Now what interest have we in the form, or size, or color of an insect, other than to describe a thing that has done to us

certain benefit or injury. I bring this matter before you in order to induce a proper examination of those insects that are so detrimental to the agricultural interests: for when we ascertain the parent, manner and place of depositing the progeny, and general habits of insects, it is no difficult task to destroy, or so cripple them as to render them harmless to our crops; and I know of no way in which we can be more useful to our fellow beings, and better promote our own interests (in a pecuniary point of view,) than to remove such pests. But it is said that man is to govern, and not to destroy any part of the animal creation, further than his immediate necessities require. I would have subscribed to this doctrine in the first state of things, for then all were rightly balanced; there was a perfect adjustment of every part, and therefore each species held its proper rank in the great scale of creation; but how do matters now stand? It would require volumes to explain them fully, and would be deemed preposterous in me to make the attempt, but allow me to make a few remarks as regards the insect tribe. It must be obvious to every man of observation, that many species of insects have increased to an alarming extent, and unless timely checked, I verily believe that they will be the means of producing a famine in our land, and we know not how soon that dreadful event may take place; already we see our fruit and forest trees declining—our wheat crops nearly cut off, corn very uncertain, clover is failing, timothy affected, and even that hardy plant commonly called buckhorn, has not escaped, and our other crops will probably, in turn share the same fate. Look at the immense damage sustained the present season. If a fellow creature takes from us a single bushel of grain, we pursue him to the utmost rigor of the law, and yet, oh! shameful to relate, we suffer this lower grade of animals to rob us of a great portion of our store. This thing has come upon us in consequence of our wanton destruction of the feathered tribe, which is that link in creation that seems intended to keep the insect race within proper bounds, and we are left to do a work which the birds would have done for us; or rather, we are now suffering an evil that would never have happened to us. Then let us at once reform, by reversing our course of action.—The insect tribe has got the ascendancy by man's misconduct, and it devolves upon the present generation to restore the equilibrium. The increase of birds will greatly assist in the work, and I earnestly entreat that some immediate measures may be taken for their preservation. I do think that if every member of the society would absolutely prohibit gunning on his lands, it would have a good effect in discouraging a practice that, to say the least of it, is disgraceful to our nature. I rejoice to learn that in some parts of our country, the landholders have associated for that express purpose, and I understand that an association of that kind exists in Montgomery County, not far from the city of Philadelphia, where the inhabitants were almost as much annoyed by the gunners as by insects: much good has been produced. Now I trust that our society will not be behind hand in this praise-worthy business; and as it will not be entered upon through ill-nature, or with a view to lessen the enjoyments of any one, but as indispensably necessary for the preservation of our crops, in which the whole community are deeply interested, surely no man will be found so lost to a sense of duty and the dignity of his nature, as to oppose such salutary measures.

Do we not remember how the blackbirds formerly followed the plough in search of grubs? Alas! that faithful bird has almost disappeared. The woodpecker and other kinds, so diligent in guarding our fruit trees, are now scarcely to be seen; the little wren, so industrious about our houses and gardens, deserves our peculiar care; even the despised hawk, I have observed to be eminently useful in destroying field mice; indeed, almost every species claim our regard.

I would further recommend to the notice of the society, the common toad, as I am inclined to believe that it is very destructive to night insects. Snakes are also useful in feeding upon the vermin of our fields, and therefore such kinds as are harmless ought to be protected. I might also mention the ground mole.

I will now call the attention of the society to the following insects, to wit:

The Hessian fly, so destructive to our wheat crops.

A little worm found in the lower part of the stalks of wheat and rye, in spring and fall, and about the joints in June.

A worm in the straw above the upper joint, which causes the early change of color of the ear, assuming a ripe appearance, but producing no grain.

A species of louse or aphis. that infest grounds and feed upon the roots of wheat, corn, young trees, &c. and do immense damage.

A species of louse that feed upon cabbage, young leaves of peach trees, &c.

Worm that attacks the roots or lower part of the trunk of peach trees.

The white grub that infests our grounds in great abundance.

Cut worm or black grub, that harbors in the ground and cuts off the young plants early in the season. There is another black grub that appears later, at the roots.

Pea fly, that infests our peas.

Curculio, that produces a worm that enters into several kinds of fruit, and causes the dropping before ripe, particularly the plum, nectarine, apricot, and peach.

Rose bug, so injurious to that beautiful flower, the rose, and some seasons is destructive to grapes, strawberries, early cherries, apples, peaches, and other fruit.

Caterpillar, that feeds upon the leaves of trees and through carelessness often blasts our prospects of fruit.

Canker worm, that infests currant and gooseberry bushes, and quince and other kinds of trees.

Small insect that appears like scales or spots on the trunk, and sometimes extending to the branches of young trees.

A species of spider or webbing insect that causes the salivary disease of animals feeding upon grass or hay infested with it.

Very small black fly that attacks young plants; perhaps it may be the same, or similar to the turnep fly, for I have not examined it sufficiently close to describe it particularly.

Striped bug, so destructive to cucumbers, &c.

Ash-colored bug, that annoys squashes, pumpkins, &c.

The Hessian fly I have already investigated, and described to the society; but allow me to add a calculation of its astonishing increase. There are three complete broods in every year, and each fly deposites from one to two hundred eggs: take the smaller number and say that one fly deposites 100 eggs, which call the first brood; these 100 each bringing forth 100, makes the second brood amount to ten thousand; and each of them producing 100, the third brood will amount to one million—that is, a single fly is increased to a million in one year; or if, as is very probable, that the deposite is two hundred fold, then the increase amounts to eight millions in one year. Now if they were to go on in this way, all our wheat and rye, and barley would be but a morsel to them. Fortunately, however, they have several enemies, and particularly the June brood; but this may not always be the case, and therefore it behoves us to look to the matter before it be too late.

I have also mentioned the pea fly, but I will further observe that on planting my peas the past season, I poured them immediately from where they had been kept closely covered, into a vessel of water, and letting them remain a little while, the flies rose to the surface of the water, and none could escape after being once wet. I think it did not take above fifteen minutes to kill them all.

The peach worm is generated by an insect of something of a wasp-like appearance, and about seven-eighths of an inch long. The male has a dark or black body, with four narrow rings of yellow around it—some yellow about its mouth and thorax—wings transparent or little inclining to yellow, edged and streaked with black—a small bunch of down at posterior, appearing through a glass like a feathered tail. The female is of a beautiful purple or mazarine blue all over, except a rich orange stripe about one eighth of an inch broad, extending around the body with a little interruption, under the belly; and the inner edges of the wings appear light or transparent—the body is somewhat shorter, but fuller than that of the male—deposited eggs on the third day after appearing in the winged state, probably owing to its confined situation in a glass tumbler; the eggs are just discernable by the naked eye, are oval and of a dull yellow color, and were attached to the side of the tumbler with a gluey substance, so that I should suppose that the deposite is most likely generally made somewhere on the trunk of the peach tree; but this is a matter for further investigation. I have furnished Thomas Say, Esq., with a pair of the insects in living state, and he will give them a proper examination, and if not already noticed by some Entomologist, he will furnish a scientific description of them.

The white grub has done great injury this season to our grasses, grains, and roots, and has increased within the last several years, to an extent that ought to alarm us. Indeed such is the present number, that should all arrive to the winged state, and bring forth a full progeny, we may calculate that there will be an increase of at least one hundred (and perhaps several hundred) fold, to feed upon our next year's crops, and if the season should prove as dry as the present, every description of plants may be devoured by this single species of insects.

The curculio might, in a great degree, be destroyed by suffering hogs to pick up the fallen fruit, in which the larva is lodged.

The rose bug may be destroyed by early attention without much labor; it first attacks the rose, having a preference for it; then, as soon as the bugs are seen to collect upon the rose, take a vessel about half filled with water, (a large tin cup is a handy thing) in one hand, and hold it under the infested flower, and with the other hand disturb the bugs, and they will instantly fall into the water, and cannot extricate themselves, and in that way I have collected great quantities of them, which by throwing into hot water were in a moment destroyed; and I am sure that half an hour so spent, for a few mornings, would entirely rid us of that evil.

The caterpillar and canker worm I need say but little about, as by a little attention

the whole of them on a farm may be destroyed in less than half a day, by a single individual.

The other insects mentioned, I hope at some future day to be able to give a better account of. It seems indeed, an arduous undertaking, but if all who are concerned would take a share, the task would become light. May I calculate on the zealous co-operation of every member of the society? But it is said that man is a fallen creature, and doomed "to eat bread in the sweat of his face," and to be annoyed during his pilgrimage here below. I fully believe such to be our situation; nevertheless, I have the most perfect reliance that when man faithfully exercises the powers with which he is endowed, he is restored to his pristine state, and that he has as complete "dominion over the fish of the sea, and over the fowls of the air, and over every living thing that moveth upon the earth," now, as he ever had; that he is still lord of this world. All the evils that are upon us are of our own doings, and the moment we turn from the error of our own ways, we shall be blessed with the proper remedy. But we are not to be mere idle spectators, we must devise all possible means of working: we must be up and doing, and there is a part for each one of us to perform—every member of the society can and ought to do something; those who do not like to write, let them speak, or take their own way of communicating their knowledge; and in that way I am sure they will be useful. And remember that "your own knowledge is as nothing unless others know you to possess that knowledge; besides, if you possess knowledge that others need, (and I have no doubt but that every one of you do,) is it not your bounden duty to offer a supply? And so far from detracting from your own store, the very act of imparting would tend to your improvement. Thus it is, my friends, that I have so freely, on all occasions, tendered my little stock; and although not of much value, yet it has afforded myself both pleasure and profit.

An Essay on Indian Corn,

Delivered by Peter A. Browne, Esq., L. L. D., before the Cabinet of Natural Science of Chester county, Pa.

Continued from page 141.

IV. The varieties of Indian Corn.

Catalogue and description of the specimens in Peter A. Browne's Cabinet of Indian Corn.

A. Yellow Corn.

A a. No. 1. The genuine gourd seed Indian corn, so called from the supposed similitude in shape, between its grains and the seeds of the gourd; the spike contains, when thus unmixed with any other variety, twenty-four rows, which is the highest number of rows on any cob of Indian corn I have ever *seen*. I have *heard* of twenty-six rows. When this corn is mixed with any other variety, its spike gradually diminishes in its number of rows until it arrives at the maximum of the variety with which it is mixed. Examples of these mixtures are seen in

No. 2, of twenty-two rows; No. 3, of twenty rows; No. 4, of eighteen rows; No. 5, of sixteen rows; No. 6, of fourteen rows;* and No. 7, of twelve rows.

A b. No. 8. Is the genuine King Philip Indian corn, so called from the celebrated Indian chief, "Philip king of the Wampanoags." It has eight rows, which is the lowest number of rows on any spike of Indian corn. It is a hardy plant, belonging to a high latitude, the seed was originally obtained from the aborigines of the north.

This variety mixes well with the gourd seed, and Nos. 2 to 6 inclusive are the products of these essays. No. 7 is a mixture of Nos. 1, 8, and 22.

A c. No. 9. The Sioux or yellow flint Indian corn, with twelve rows. The seed was obtained from the Sioux tribe of Indians, who, at the settlement of Canada, inhabited the north, but who are now residents of the west.

No. 10. The Sioux, grown in Pennsylvania. Twelve rows.

No. 11. The Sioux and gourd-seed, mixture. Sixteen rows.

B. White Indian corn.

B a. White flint. *B b.* White flour corn.

B c. White Sacharine, or sweet Indian corn.

B a. No. 12. Genuine white flint. Twelve rows. Virginia.

No. 13. White flint. Ten rows.

No. 14. Early white flint. Twelve rows.

B b. White *flour* corn.

No. 15. From Peru. Eight rows.

No. 16. Pennsylvania. Eight rows.—Called in Maryland, Smith's early white.

No. 17. New Jersey. Eight rows.

No. 18. New-York. Ten rows.

B a. & B b. Mandan Indian Corn.

No 19. A mixture of No. 12 and No. 15. Grown in the Indian Village of Mandan.

B c. White Sacharine or sugar corn.

No. 20. The early Sacharine, twelve rows, grains shrunken.

C. Hæmetite, or blood red Indian corn.

No. 21. Common sized hæmetite, with 12 rows and red cob.

No. 22. The red cob with white grains.

No, 23. The red cob with yellow grains

No. 24. The red cob with brown grains.

No. 25. The red cob with white gourd seed.

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* Called in Maryland the Dutton Corn.

No. 26. The red cob with gourd seed and yellow flint.

No. 27. White cob with red grain.

No. 28. Speckled red and yellow grains on a white cob.

No 29. The same on red cob.

No. 30. The dwarf hæmetite, commonly called Guinea corn.

D. Blue corn.

No. 31. Blue corn. Ten rows.

E. No. 32. The corn of Texas; each grain is enclosed in a pod or husk, and the ear in a husk.

No. 33. Corn found in an envelope of a Mexican mummy.

No. 34. Corn grown near Sheffield, Yorkshire, England, in 1835, from seed raised by Wm. Cobbett.

No. 35. The famous Dutton corn.

A former collection made by me, and presented to the royal Academy of France, (Paris,) contained forty-two varieties.

V. Of the varieties of Indian corn, which kind is preferred for cultivation?

Mr. Taylor says, that in selecting Indian corn regard should be had to three circumstances.

1st. The most stalk.

2d. The largest cob.

3d. Longest grain.

To which I will add, 4th, early growth and quick culture.

Upon the size of the stalk he sets a high value. 1st, because it produces some economy in labor; for one man can gather far more grain, stalk, blade, top, shuck and cob, in the same time when the plant is large than when it is small.

2d. It produces a greater quantity of fertilizing matter to be returned to the soil.

3d. The longest and thickest cob (if the length of the grain is equal) produces the most corn.

4th. Length of the grain, (supposing the cob to be equally long and large) decidedly settles the superiority of the farinaceous product.

5th. The earliest corn, and that which comes quickest to maturity, is most esteemed by the horticulturist, as it commands the best prices for the table, but it is generally dwarfish.

VI. Capability of preservation and retention of power of germination.

That Indian corn, when well dried, will keep for many years and preserve its capability of germination, is stated by most writers upon the subject; but none of them that I have consulted, specify the particular time it may be kept, or set any limit to its re-productive property. The ear or spike of corn found in the envelope of the Mexican mummies will serve to put this question to the test, for Mr. Peale has obligingly consented that the experiment may be tried upon a few grains. The result will be communicated.

To prevent the seeds of corn from germinating they should be kept *dry;* no seed can germinate without *moisture.*

No germination takes place in pure carbonic acid, hydrogen, or nitrogen gas, or very rarified air, nor do these gasses destroy the seed; they merely prevent its developement into a plant.

Nor will any germination take place in a temperature below the freezing point of water.

VII. The method of cultivating Indian Corn in the United States.

Col. John Taylor, of Caroline county, Virginia, gives us the following account of the method of cultivating Indian Corn in Maryland, Virginia, and North Carolina; [Arator Balt. 1817; p. 101.]

"The rows are never ploughed but in one direction, cross ploughing being wholly abandoned. Their width is five and a half feet.—The field being once thrown into the position of ridges and furrows, never requires to be laid off again. The furrow is left as deep as possible, and when the field comes again into tillage, the list or ridge is made upon this furrow, so that there is a regular alternity between ridges and furrows. If the soil is of a friable nature, a large plough drawn by four horses, and cutting a sod about 12 inches wide and 8 inches deep, is run on each side of this old furrow, and raises a ridge in its centre, on which to plant the corn. The old ridge is split by a large trowel-hoe-plough, having a coulter on the point, two mould-boards, drawn by four horses, and cutting ten inches deep. If the soil is stiff or tough with turf, then first plough with four horses, ridges or lists on the old water furrow, with four furrows of the same depth and width. On the summit of this ridge or list, a deep and wide furrow is run with a trowel-hoe-plough and two mould-boards, in which the corn is planted, and covered between two and three inches deep with the foot. The planting is guided by a string carried across the ridges, with coloured marks at the distance apart intended for the corn. This furrow is a complete weeding of the ridge, previous to planting, which it should barely precede. The corn receives no more ploughing until it is thinned and hand-hoed along the rows, about two feet wide. After this, a deep furrow is run on each side of it, by a large plough, drawn by two horses, with a mould-board, causing the earth thrown out of it to meet the corn, though the furrow is a foot from it. Thenceforth the tillage consists of a streak or furrow, of a mere weeding plough called a 'skimmer,' cutting with two wings, twenty-four inches, drawn by one horse; and of a central, deep and wide furrow made with a trowel-hoe

plough and two mould boards, drawn by two horses; to be repeated when necessary. The whole to be concluded with a narrow weeding or hand-hoe, along the slip, in the direction of the row, not kept completely clean by the skimmer."

The advantages of this method of cultivating corn with high ridges and deep furrows, Mr. Taylor states [p. 102,] to be, "that the corn is planted immediately over the furrow of the preceding crop, and by completing the reversal of the ridges early in its culture, it grows upon a depth of tilth three or four times exceeding what is attained by planting and cross ploughing in the usual mode. Its roots are never cut in one direction, and this great depth of tilth thus early obtained, by superceding the occasion for deep ploughing in the latter period of its growth, saves them in the other. The preservation of the roots and their deeper pasture, enables the corn much longer to endure drought. The litter of enclosed ground, thrown into the deep furrow upon which the corn list is made, is a reservoir of manure, far removed from evaporation; within reach of the roots, which will follow it along the furrow; and calculated for feeding the plant in droughts. The dead earth brought up by the plough from the deep furrow, is deposited on each side of it, without hurting the crop on the ridge, and with the bottom of the furrow remains for several years to be fructified by the atmosphere, so as to escape the present loss sometimes accruing from mingling too much dead earth with the soil by deep flat ploughing; and yet to mellow and deepen it more rapidly. And much labor is saved in planting the corn, whether the hoe is used after a string, or the string is carried across furrows previously made on the ridge.

In all lands unable to produce forty bushels of corn to the acre, the proper distance is five and a half feet square, with two or three stalks at each station, except in poor spots, where one will suffice. If it can produce that crop or more, he plants it at the distance of five feet six inches by 2 feet 9 inches, leaving two stalks in sandy and three in stiff lands.

The ridges upon which the corn is to be planted should run north and south, to equalize the benefits and injuries derived from the sun.

In regard to curing the blades, which are called fodder, he observes [p. 192,] that it must be carefully preserved from the sun, and from rains and dews. If it is shocked, there should be a flue from the side the wind generally blows at that season, and up the centre, to admit of a free circulation of air. The ends of the blades must be laid forward.*

To be continued.

*"The Indians of our country had an opinion that the best time for planting Indian corn, was when the leaves of the white oak, (Quercus alba) first made their appearance; or, according to their expression, are the size of a squirrel's ears.—Mrs Lincoln's Bot.

On Yoking Oxen.

A great diversity of opinion exists as to the best method of harnessing oxen; it has been made a subject of almost as much dispute as the propriety of working them. The most ancient, and until within about the last century the only mode, was the yoke, which nature seems to have pointed out in the strength with which the animal is furnished about the head: he uses it for defence, and when extraordinary exertion is required at labor, he, when yoked, puts his nose as close as possible to the ground, thus evidently pulling by the muscles of the neck. Throughout the south of Europe where oxen are generally used for labor, it is the sole method known of attaching them to the plough or cart; but they are there universally worked in pairs, whereas in this country they are sometimes used singly in carts, or one before the other in the plough, in which cases the yoke is certainly awkward. Its cumbersomeness, when they are yoked singly, suggested the idea of horse-collars and harness, which being found to answer the purpose for light work, has been very extensively adopted, as an improvement on harnessing pairs is of very doubtful value.

The French method of yoking oxen was introduced into Ireland a good many years ago by the Earl of Shannon, and an improvement on it has been effected by giving to each beast a separate yoke, or forehead-board, under which the animals step more freely than when bound together, and can besides be worked singly, as represented in the annexed cut.

The yoke consists of a flat piece of ash about eight inches wide in the middle, reduced to three at the ends, and proportioned in length to the size of the ox, the object being just to clear his sides from the traces, or chains, as at figure No. 25. This board is lined with woollen cloth and stuffed with hair; to an iron staple affixed at either end is hooked a long trace, or chain, which reaches from the extremities of the swingle-tree.

Figure No. 26 represents the back-band, which is of ash, about 14 inches long and 3 1-2 broad, concave within and stuffed with hair so as to lie with ease across the back; at either end hangs a short chain, to which the traces are hooked up.

When four oxen are yoked, the draught is in like manner with long traces, and those of the leaders are supported by a strap across the shoulders of the hinder cattle. It is how-

ever desirable, in the choice of oxen under this yoke, that their horns should point upwards so as not to interfere with the trace: in England the shape of the horn is sometimes *set* by art, but it is a severe and cruel operation.

Fig. 25.

Fig. 26.

It will be observed that the draught from this yoke is solely from the neck, and not at all from the horns, to which the board is only strapped to prevent it from falling off; so that in this manner the ox rather pushes than pulls. The intelligent reporter of the King's County, from whom this description is taken, says, "that the cattle are very easily broken to this method; that they step out very light and free, and though severely pressed, to prove the experiment, on a broiling summer's day, in a very heavy fallow, and up-hill for a long pull with the coulter buried to the beam, they worked quite easy without puffing or lolling out the tongue, which would have severely distressed the best trained and strongest bullocks if harnessed in the usual way from the shoulder." The plan has, in fact, been admitted to be an improvement on the common mode, but such is the force of prejudice, that it has not been adopted by the neighboring farmers.

When worked in collars, they are generally driven two abreast, and often without winkers; and in most places throughout Ireland, instead of collars, a twisted rope is used with straw back-band, called *suggans* and *gads*, which, though rather offensive to the eye, is nevertheless as safe and easy to the beast as the collar, and much less expensive. In harness, a horse-collar turned upside down answers the purpose. Woollen collars have been tried for oxen, and two kinds, differently formed, have been used; but there is great difficulty in fitting the shoulders of an ox,—and the hardness of the material employed, when they are not nicely fitted and closely made, hurts the blades. A drawing is added, in case of any one choosing to try them, as there certainly would be a considerable difference in expense; but the old plan would probably be found the most advisable, though those here represented have been recommended by Marshall "as incomparably preferable to any other ox-collar that he had made use of." He is, however, of opinion that fig. 27 —which is convex, and is, in the fullest parts, from 1 to 3 inches thick, according to the size and shape of the ox's shoulder—deserves the preference, as being firmer than fig. 28,—which is made in the form of ninepins,—as the iron bow by which they are connected is apt to become twisted.

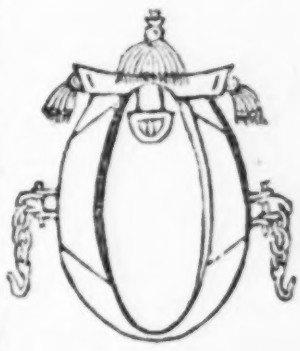

Fig. 27.

Fig. 28.

No. 27 appears to bite on the fleshy part of the shoulder, and leaves the bones full room to play. The fault in No. 28 arises, however, merely through some defect in the workmanship. The idea of their construction arose not alone from their being more cheap than stuffed collars, but also from the observation that, when a horse galls, it generally proceeds from some knot or lump in the stuffing; but let the straw collars be ever so hard, yet, if they are quite smooth, they seldom gall; and the truth of that remark is said to have been fully proved on the shoulders of his own oxen, "for they became as fine and polished as the wood itself."

The world is an echo which returns us our own words; for which reason, if one would be well spoken of in the world, he must speak well of the world.

Mangel Wurtzel.

To the Editor of the Friend:—

Knowing thy interest in agricultural affairs, and thinking many readers of "The Friend" would feel a similar interest in the very interesting particulars detailed in the accompanying statement; I send thee the following relation of them, drawn up at my request by the friend himself, and of the accuracy of which there can be no doubt. I think the produce of the cow beet so great and so well adapted to feeding cattle, particularly on small arms, that I am desirous of giving a wider circulation to the accompanying particulars in order to induce our country friends to give them further trials. C. W.

Particulars relative to a crop of beets, (Mangel Wurtzel,) raised in the season of 1837, on the farm of Isaac C. Jones, called Rockland, on the banks of the river Schuylkill, in the neighborhood of the city of Philadelphia, viz:

Net measure of the ground on which they stood was 67 square poles. Add for the headland or turning ground, 4 do. Total, 71 square poles, being nine less than half an acre.

The produce on the above mentioned ground, excluding the leaves, and confining it entirely to the roots, amounted to four hundred and thirty bushels, agreeably to the measurement of Joseph Berry, the farmer who attended to their culture for the said Isaac C. Jones throughout the season. On weighing a portion of these beets, it was ascertained they would average fifty-five pounds per bushel, making an aggregate of twenty-three thousand six hundred and fifty pounds, or a little over ten amd a half tons (of 2250 pounds each,) being at the rate of twenty-three and two-third tons to the acre, or nine hundred and sixty-nine bushels.

Many of the above mentioned beets weighed from seven to thirteen pounds. One that was particularly measured and weighed, produced the following result, viz:—Twenty-seven inches in circumference, and weighed thirteen and a half pounds.

The produce would have been considerably increased had not many of the seed proved defective, and the plan of transplanting resorted to; but the latter, if well done, answers an excellent purpose.

The above-mentioned ground was accurately measured by said Joseph Berry, and the subscriber, this 11th month, 8th, 1837.

Isaac C. Jones.

Never shrink from doing anything which your business calls you to do. The man who is above his business, may one day find his business above him.

From the Farmer and Gardener.

Brooks' Silk Spinning Machine and the Silk Culture.

We have always been sanguine with respect to the ultimate success of the silk culture in this country: our opinion was grounded in our honest belief of its great profits, itshappy adaptation to ours oil and climate and to the interests aud wants of our people: but there was one difficulty which always presented itself to our mind, and made us fear that some years would have to revolve around before it would be fully established. ☞ *We allude to a want of a market for the cocoons.* Almost any farmer with his own domestic force, could gather leaves, feed and attend the worms, and produce a crop of cocoons; but the latter without a market near at home or the means of converting them into silk, being of a nature that forbid compression, and occupying much space, would not in that state bear distant transportation to find a market. And as matters stood a few years since, the only good effected in submitting the cocoons to the operation of the Italian reel, the one most approved, was to transform the delicate fibre from its conic shape into raw silk, which had again to be submitted to the operation of *twisting* before it could be said to be generally merchantable. All these difficulties, however, are, in our estimation, entirely removed by the introduction of the excellent machine invented and successfully put into practice by Mr. Adam Brooks, of Scituate, Massachusetts. Of this machine, and its wonderful performance we had often heard, but could not from any description of its mode of operation, fully comprehend its very great use and peculiar fitness for the purposes of the American agricultural public. We had contemplated a jaunt to the eastward next spring, for the purpose of examining the operation of one of Mr. Brooks' machines, and of gaining such practical knowledge as would enable us to go into the silk culture the ensuing year, having already provided ourself with an abundant supply of the morus multicauls trees, the best variety of the mulberry for the feeding of worms and production of silk. The opportune arrival of Mr. Brooks in our city, however, last week, has saved us all that trouble and expense. We prevailed upon him to take his machine out to our residence in the country, where he put it into operation, and worked up about half a peck of cocoons, to the entire satisfaction of every one present, not only winding off the gossamer silken fibre from the cocoons, but at the same time converting it into a most beautiful *sewing silk*, doubled and twisted, equal in evenness and fineness to the best Italian, and greatly superior in elasticity and strength. This was all done with perfect ease, and so simple is the

machine in its construction that any woman can obtain a competent knowledge of it in two or three hours.

One great object in the construction of this machine, arising from its simplicity and fewness of parts, is, that it but seldom, if ever, gets out of order, if well treated; and another not less important is, that should it by any accident become deranged, almost any ingenious mechanic can at little cost put in repair. These are *desiderata* which must largely contribute to bring it into general use, and render it a favorite with every one engaged in the silk culture. With one of these machines, no farmer need be at a loss for a market for any silk he may raise, as his wife and daughters, without neglecting their other occupations, with the aid of a lad to turn the wheel, can manufacture all he may make into good sewing silks. His silk thus fabricated, as every one knows, will readily find a market near at home, in almost every village; but should a market not be thus convenient, it can easily and at little expense be transported to any of the larger cities, where he is sure to find a ready market and good prices. One of these machines, moved by a hand power, attended by a female and lad, as above stated, can readily turn out from one-half to two-thirds of a pound of good sewings in a day. The value of the cocoons in their raw state is *four dollars* per bushel, that is $4 per pound, a bushel making a pound; when manufactured into sewings, it will be worth from $7 to $11 per pound, according to the care and skill with which it may be fabricated. Let us now, then, attempt an approximation to something like a calculation of the profits; and in order to do so we will presume that a farmer has an acre in culture. We have in our unpretending manual assumed, that an acre is competent to furnish foliage sufficient to support 540,000 worms; that calculation was based upon the supposition that they were to be fed upon the leaves of the *White Italian Mulberry;* but from our experience we have no hesitation in affirming, that one acre planted in the *Morus Multicaulis*, or *Many Stalked Chinese Mulberry*, will furnish leaves enough to feed 1,000,000 of worms at the first feeding, and if the eggs be *kept over*, as they can be by being placed in an *ice house*, the same acre of trees will furnish foliage enough to feed a *second crop* of an equal number of worms.—But let us wave the feeding of the second crop, and this will be the result.

A million of worms will produce 333 1-3 bushels of cocoons, which will yield 333⅓lbs. of silk, which silk when made into sewing silk will be worth at $7 per pound, the minimum or lowest price, $2333 33 1-3; if we deduct the expense of manufacture, as follows: two women, or girls, are competent to attend four machines, with the aid of 4 boys to turn the wheels: in 6 months, with easy work, these can convert into sewing silks, 333 1-3lbs. of silk. I set down the wages of the two women at $3 per month, which for the 6 months they will be occupied, will amount to $36: allowing their board to be worth $10 per month, it will be $110; the wages of the boys at $5 per month, is $120, their board at $10 per month, is $240: cost of the services of two women to reel 333 1-3 lbs. of silk into skeins, say two months, board $40, wages $12; interest on cost of 4 machines, say, first cost $40 each, transportation, $5=$180; interest per annum at 6 per cent., $10.80; cost of cleansing, coloring, and doing up into separate skeins, if done at a dye-house, $1 per pound, on two thirds, say 222 lbs.=$222; cost of cleansing the balance of 111lbs. 25 cents=$27.75, or, for the whole process, $249.75; cost of feeding the worms, if fed on morus multicaulis leaves, $41.63.

Now let us see how the account will stand:

RECAPITULATION.

ONE ACRE OF SILK IN ACCOUNT WITH CULTIVATOR.

	Dr.
For wages of two women 6 months,	$36 00
For board of do. " "	120 00
For wages of four boys, " "	120 00
For board of " " "	240 00
For cost of two women to reel,	52 00
For interest on cost of 4 machines,	10 80
For cost of cleansing, coloring, &c.,	249 75
For cost of feeding the worms,	41 63
Balance as per contra,	1,463 15⅓
	$2,333 33⅓
	Cr.
By value of 333⅓lbs. of sewing silk, at $7 per pound,	$2,333 33⅓
	$2,333 15⅓
By balance or clear profit of one acre, in the silk culture, the silk converted into sewing silks,	$1,463 33⅓

The agricultural reader will perceive, that in this estimate we have taxed the acre in silk culture with *laborers*, and the board of such laborers, as though the cultivator had been compelled to call in *extra help*, whereas we believe that there are few who would engage in the business but would have the necessary help within themselves, for all purposes except feeding the worms, and this expense, from the circumstance that the leaves can be gathered and the worms fed just as well by children from 7 to 10 years of age, as by grown persons, it only being necessary to employ one careful hand in the cocoonery to give a general superintendence over them, may be

much reduced. And what more beautiful or interesting employment could a farmer ask for his wife, daughters and sons, than that of tending to silk worms, an occupation that the empresses and nobility of the *east* monopolized for centuries. He will also perceive that the cost of dyeing, cleansing and separating the skeins forms a heavy *item*, because it is presumed that this work is to be performed at a dyeing establishment; now the truth is, that any good housewife with the directions contained in the work we had the honor of publishing a year or two ago, may save to her husband all this expense, saving and excepting about ten cents per each pound of silk, for dye-stuffs, making $22.20.—If, then, we subtract these expenses, which may be saved, it will make a difference in favor of the cultivator of $795.55. That the dyeing, cleansing and separating the skeins may be as well done in each cultivator's family, we have no hesitation in affirming; for Mr. Brooks exhibited to us samples of sewing silk, which had not only been spun by his wife, but cleansed, dyed and put into skeins also, and we do not ask too much for it when we say, that it will lose nothing by comparison with the very best Italian sewings we have ever seen. He also shewed us some specimens of silk handkerchiefs which had been made by his lady, and wove on a common loom; these for softness, fineness, and high finish, were equal to any imported article in the market. The stamping of the figures on these were executed by Halliday, of Lynn, Mass.

It may not be inopportune before we conclude to make a few remarks in explanation of our former *estimate* of the cost of attendants during the process of feeding, which occupies about six weeks at farthest. As we have before premised, that estimate was based on the supposition that the leaves were to be gathered from the white Italian Mulberry, and as the leaves of the Morus Multicaulis is nine or ten times larger than those of the former, the expense is consequently reduced in a proportionate ratio; but as we like to make *full allowances*, we have only in *this estimate* reduced the expense one half.

In our Manual we stated that the legislature of Mass. had granted a premium of 50 cents on every pound of *reeled* silk; they have subsequently repealed that act, and now grant a premium of $1 on every 10lbs. of cocoons raised in this state; 50 cents per pound on all silk raised and reeled in the state, and 50 cents for all silk grown, thrown or twisted in that state: thus giving a premium of $1 per pound to the producer and manufacturer of sewing silk, an amount fully equal to all the labor, where it is done as it should be, in one's family. This act of high and exalted patriotism acts as an incentive among her citizens and is producing the happiest effects upon the interest and well being of that ancient commonwealth. Should not her noble example urge upon the legislatures of the other states of the confederacy to make enactments granting similar bounties! We think it should.

We cannot close this article without mentioning that Mr. Brooks will deliver Reels in Baltimore, competent to perform the work of converting cocoons into sewing silk, for from $40 to $45; his residence is in South Scituate, Massachusetts, where he manufactures them extensively. He has already received *premiums, medals, and certificates of excellence*, from the following Institutions.

"The Agricultural Society of Plymouth county, Massachusetts."

"The State Agricultural Society of Massachusetts."

"Philadelphia Agricultural Society."

"Kennebec (Maine) Agricultural Society."

"New York State Agricultural Convention."

"Fair at Boston, Massachusetts," and the "New York American Institute."

There is much truth in the following advice, given in the Boston Courier; and it might be adopted with benefit in our sections of the country as well as New England:—

Advice Gratis.

A few days ago we heard a hearty and thrifty looking farmer inquiring, in a store in State-street, if the gentleman knew of a place in a store where he could put one of his sons. At the risk of being thought impertinent, we asked him if he knew of a place in the country where a boy was wanted to turn up the sod. He said he did not then; he wanted a hand a while ago, but he hired this man, pointing to his companion, a hale, hearty man of thirty-five.—This led to some further conversation in which we learned, that the farmer thought it best to send his sons into the city, to learn to trade, particularly if they were not of stout constitutions, and supply their places by hiring men to work on his farm.

In this opinion the honest farmer is by no means singular, but we apprehend that the advocates of his doctrine lie under a sad mistake. The love of speculation and the hopes of accumulating an independent fortune, or, at least, a competency, without actual personal labor, are the curse of New England.—To country boys at 15 or 16, the difficulties of trade and the dangerous uncertainties of shop-keeping are inconceivable. They see nothing but ease and happiness in the employment of the well-dressed clerks of the counting house, and forthwith they must leave the farm, where money is turned up in every

furrow, and health sparkles on every blade of grass, to throw away half a dozen years of the spring of life behind a counter. Their minority is closed, and they must then enter upon the world with little or no improvement in their moral, intellectual or physical habits, with no capital but their integrity and good name (if luckily they have been able to pass through such a dangerous apprenticeship without loss of these qualities) wherewith to commence business, and with the knowledge of no profession, but one that is full of competitors, and which offers them no prospect of independence. The city is crowded with shopkeepers, and there is no branch of what may be called *trade* that is not overdone. If a young man obtains credit for a small stock of dry goods, or hardware or groceries, ten chances to one he is unable to meet the *first* payment, and if he should be so fortunate as to have turned his stock and made a small profit by the revolution, the second or third period of payment finds him unprepared and he must either *clear out* (as the phrase is) and seek a living at New York or some other remoter place, or he must write "*Agent*," under his name, on the sign, and struggle with his debts and his bad luck a little longer. The result of this latter arrangement need not be told. Every body knows how few of those who *fail*, ever recover from the shock which broken credit produces; and how hard it is for an "*Agent*" of this description ever to recover the character of a *principal*.

How happy would it be for hundreds and thousands of our young men, if they could be persuaded that a few acres of ground are a better capital, than as many thousands of dollars procured by writing their names at the bottom of a negotiable note; and what years of misery might be saved, if men would believe that a dollar actually earned by honorable and healthful labor, as farmers and mechanics, is worth a hundred in prospect to be gained in trade and speculation.

Barley Flour.

Flour made from barley is becoming an article of diet, in various parts of the state. It makes the finest of cakes, and when prepared in like manner, is by many preferred to buckwheat. Farmers are making the same discovery with regard to this grain that they have in regard to apples. They find it to be as unlike economy to send their Barley to the brewers to be converted into beer to make paupers and criminals for them to support, as to convert their apples into cider to create an appetite in their chidren for stronger drink. Apples are now considered about as valuable as potatoes to fatten hogs; and barley, ground, is a most valuable food for all description of stock.

For the Farmers' Cabinet.

Winter--To the Husbandman.

The song of 'the husking' is o'er,
The corn-crib of plenty doth tell;
The garner o'erflows with its store,
And the barns with rich provender swell!
The toils of the husbandman, earth
With crops of abundance hath blessed;
Now, the plough-boy to school hastens forth,
And the plough hath its 'season of rest.'

The herds from the pastures have come,
(No longer with green herbage crown'd,)
To the barn-yard, their long winter home,
Where a carpet of straw is spread round;
And well have their riches deserved,
The care which the farmer bestows,
Who hath snug and warm stables reserved,
To shield them from pitiless snows.

The hickory piles, towering high,
Give promise to brighten the hearth;
While they bid us turn Charity's eye
To the poor and the needy of earth.
And the generous mug overflows
With cider, all sparkling and clear;
Which at eve, when *without* the wind blows,
Within is the farmer's 'good cheer!'

The housewife hath willingly sought
The 'wool and the flax' of the field,
And clothing in carefulness wrought,
Her household from winter to shield.
While the rich golden butter and cheese,
Thrice rich, as the work of her hand!
Shows that luxury follows not ease,
But with *industry* goes through the land.

And oh! if the lovers of ease,
Who seek it in pleasure's turmoil;
Who try all that pledges to please,
And have disappointment for toil;
Would turn to some homestead at night,
And see the true peace of that hearth
Where contentment and competence light
A smile more enduring than mirth:

Sure, then, would the gayest admit
That happiness dwelleth at *home*,
And never was treasured as yet,
In the heart that for pleasure doth roam.
There seated beside the bright fire,
The helpmate her knitting doth ply;
While with book or some story, the sire
Makes time seem *too* swiftly to fly.

The children, a group, cluster round,
All smiling through roses of health;
Oh! where can those riches be found,
Surpassing the husbandman's wealth?
And ah! if there's gratitude due
From *all*, to the Father of love,
How oft should the farmer renew
His thanks for these gifts from above!

E. C. S.

Cedar Brook, Plainfield, N. J.

Hemp and Sun Flower Seed Oil.

From a communication in the Cuyahoga (Ohio) Plough Boy, we learn that Hemp and Sunflower seed are being used for making oil for lamps, and it is said to be superior to any oil save sperm and equal to that. Each kind of seed yields one gallon to the bushel. The Sunflower is said to be superior to the hemp seed and owing to the price for hemp seed, it is thought to be inexpedient to make it into oil. But the Sunflower yields about 160 bushels to the acre and therefore is believed to be very profitable. The cost of expressing the oil is 25 cents per gallon, which would leave a good profit.

The Native Grape.

We are not yet well acquainted with all the varieties of fruits in the American forests, nor how they may be improved by cultivation. We have ourselves found in the woods better grapes, than that called the Isabella. A correspondent of the Cincinnati Daily Express says:

"I am cultivating some new native varieties of grapes, that are entirely free from the hard pulp generally prevalent in our native grapes, and for the table, quite equal to the foreign grape: I have not yet tested the quality of all of them for wine. I have one variety resembling the Noiren of Burgundy, that promises to make a superior wine, both red and white, but its produce will be comparatively small. The most celebrated of the Madeira wine merchants was recently in our city, when a bottle of each of these wines (red and white) was set before him, together with two bottles of Madeira, very old of my own importing, red (Tinton) and white. No intimation was given that either was domestic, but a gentleman at the table requested him to select the best; he decided in favor of the domestic.

Milk Cows should be well Kept.

The keeping of cows in such manner as to make them give the greatest quantity of milk, and with the greatest clear profit, is an essential point of economy. Give a cow half a bushel of turneps, carrots or other good root, per day, during the six winter months, besides her hay; and if her summer feed be such as it should be, she will give near double the quantity of milk she would afford, if only kept during winter in the usual manner and the milk will be richer and of better quality.

The carrots, or other roots, at nineteen cents per bushel, amount to about eighteen dollars. The addition of milk, allowing it to be only three quarts a day for three hundred days, at three cents per quart, amounts to twenty seven dollars. It should be remembered too, that when cows are thus fed with roots they consume less hay, and are less liable to several diseases, which are usually the effects of poor keeping.—*Farmers' Assistant.*

Specimen of the "Down East Women."

At the late fair at Boston, was presented a very large carpet, manufactured from odds and ends, bits of old cloths, flannels and stockings, in short every thing in the shape of woollen rags, from a ravelled thread up to a bed blanket, the work of Mrs. Abigail Welsh, of Newburyport. At the distrnce of five feet, which is near enough for well sized people to look, it has the appearance of a rich Turkey carpet of a handsome pattern and it will last for years a beautiful carpet. The value of this kind of work may be perceived by the following estimate of cost, which we find in the Transcript:

Cost of tow cloth for foundation,	$2.67
Dying the rags and old stockings,	2.00
Throwbs placed at Lowell for border,	2.00
	$6.67

The carpet was made during odd hours, after the labor of the family was performed, in four months, and for the trifling sum above stated, with the toil saved from the hours of idleness, an elegant and almost everlasting carpet produced.—*Nantucket Inq.*

The Sun Flower.

The sunflower is a plant of much greater value than is generally known. Instead of a few being permitted to grace a parterre, and considered only as a gaudy flower, experience warrants my saying it should be cultivated by every planter and farmer as part of his provision crop. It can be turned to profitable account on all our Plantations; for certain purposes it is more valuable than any other grain known to us; in as much as it can be made to yield more to the acre in exhausted soils, with little labor, and with greater prospects of success.

Its seed are wholesome and nutritious food for poultry, cattle and hogs, and very much relished by them.

From the seed an oil is obtained, with great facility, as delicate, it is believed, as that of olives.

They are also pectoral. A tea made of it is quite as effective as flaxseed, or any other, in catarrhal affections.—On one occasion tea sweetened with honey, was of so much more service to me than the prescription of my physician, that I attributed my early restoration in health to its agency alone. Certainly

a favorable change did not occur until I used this tea, which I did upon the recommendation of a citizen of one of the upper counties of North Carolina.

Its leaves and stalk, in the green state, are preferred to any other provender. I have thrown green grass and fodder into one heap and sunflower leaves in another, to try the cattle and they have ever commenced eating the latter first; this I have tried often with the same result. The whole plant, cut up in the green state, and boiled with cotton seed, or a little meat, affords a delicious food for cattle or hogs. To be convinced of this let one taste the bruised leaves or stalk of the plant; he will find its flavor aromatic, like that of the parsnip, with more sweetness.—*Southern Agriculturist.*

For the Farmers' Cabinet.

Messrs. Editors:—

Permit me to suggest to your Correspondents the expediency of signing their proper names and address, that they may be communicated with by mail; I have obtained much advantage from this source. Also, in *all statements* relative to crops to give a full description of the *nature* and *quality* of the soil. I am gratified to find your useful Cabinet growing more and more interesting.

Yours respectfully,

David L. Dodge.

Cedar Brook, Plainfield, N. J., Dec'r., 1837.

From the London Mechanics' Magazine.

Practical remarks on Keeping Bees.

Sir,—Having been requested by some person desirous of keeping bees, to give, through the medium of the Mechanics' Magazine my opinion as to the best method of managing these useful insects, I beg to solicit the favor of the following observations being inserted.

I have kept bees nearly twenty years, and practised various plans with a view to gain the greatest produce in honey and wax with the least trouble, but more particularly with a view to the preserving the lives of the bees, and feel confident that the story-fying system, which I believe Wildman practised, is the best. I tried for six or eight years the plan Mr. Nutt advocated, which, by-the-bye, is as old as any of the plans known, but without meeting with any thing like the success of the common cottage hive. A strong stock in the latter had produced me an early swarm and cast, the swarm produced in a good season upwards of forty pounds of honey, and the cast fifteen pounds, the stock being kept five or six years. The honey thus procured is always of good color, and fit for sale; and when after six seasons the parent stock is destroyed, the honey, being dark, may be used to make meed, or sweeten wine with, a strong swarm being kept to supply its place. This plan requires the destruction of the bees, and is therefore censured as inhuman; but to me is not more so than destroying beavers or cats for their skins, or catching fish to manure the land with; the consumer never considering how produce is procured, and should therefore, be considered the most culpable, if such acts are breaches of humanity. The hives I now prefer are flat, having wooden tops fixed on with wires. The inside should be twelve or thirteen inches clear, and about seven inches high, the top having a centre hole, and three or four others round it near the outside, each hole being two or three inches diameter, and fitted with nice bungs. If no swarms are wanted, a large glass, or small straw hive may be put on the top about the end of March, or a small glass to each hole, previously pulling out the bungs, gently turning them round first, each glass having a bit of paper pasted on it, stating its weight when empty; such glasses being kept from the light, by an empty hive being placed over them. Every ten or twelve days they should be examined and when filled may be removed, and others put on, as long as the season permits. If a stock is weak, a new swarm or a cast may be put on the top of it, and the entrance closed till eight or nine o'clock the following night. These stocks may be preserved seven or eight years, but should be hept in a house or shed; and when the winter begins, the bungs having been replaced, should be covered over with sacking or other warm articles. Glasses may be put on a swarm immediately after hiving them, removing them in three or four weeks, to enable the bees to procure enough for the winter. The boards above mentioned should be made of pine plank, half an inch thick. The bottom boards should be made of the same, one inch or one inch and a half thick, having a piece projecting for the bees to light upon. By pursuing this plan, any number of stocks may be kept with but little trouble, and the bees saved; but the placing the glasses on empty hive is essentially necessary. I am, Sir,

Your obedient servant,

G. L. Smartt.

Enfield, Feb. 10, 1837.

Statistics of Eggs.

M. A. Legrand, of Paris, says the number of eggs exported from France, from having been less than two millions in 1813, increased in 1822, to nearly fifty-five millions. In 1824, ninety and a half millions. In 1825, 75 millions were exported to England, 60,800 to Belgium, 49,693 to the United States, and nearly as many to Spain and Switzerland. In Paris every soul eats over 115 eggs a year! in all the rest of France over seven millions are consumed. What hens the French must have!

ARTICLES.	Philadelphia, Dec. 16.	Baltimore. Dec. 12.	New York, Dec. 12.	Boston, Dec. 13.
Beans, white, per bush	$1 37–1 62½	1 25—0 00	0 14—0 15	1 12–1 25
Beef, mess, new, per bbl	14 00–15 00	11 00–13 00	11 00–13 50	14 50–15 00
Bacon, western, per lb	8— 10	7— 9	8— 10	.....
Butter, extra, per tub	12— 14	16— 20	21— 23	20— 23
Butter, fresh, per lb. (market,)	18— 25	20— 25	20— 25	25— 28
Hams, per lb	12— 14	13— 13½	10— 12	14— 15
Hog's Lard, per lb	9½— 10	9— 10	8½— 9½	9— 10
Cheese, American, per lb	9 — 10½	9— 11	8— 9½	8— 9
Beeswax, yellow, per lb	25— 26	23— 25	26½— 27½	26— 31
Beeswax, white,	.....	38— 40	38— 40	38— 40
Bristles, American,	42— 65	25— 65	25— 65	.....
Flax, American,	7½— 8	9— 10	6— 7	9— 12
Flour, best, per bbl	9 00—9 25	9 00—9 25	9 25—0 00	9 50—9 62
GRAIN—Wheat, per bush. Penna	1 95—2 00	2 00—2 10	1 95—2 10	.....
do. Maryland,	1 60—1 75	1 80—2 00	1 60—1 75	.....
Rye, per bushel,	1 05—1 08	0 90—0 00	—1 25	1 30—0 00
Corn, do	75— 90	95—1 00	1 12—1 16	1 02—1 07
Oats, do	40— 42	37— 38	40— 50	52— 56
Barley, do. Penn	85— 90	.....	0 00—	0 00—0 00
Peas do	1 00—1 25	00—0 00	— 8	.....
HAY, Timothy, per 100 lbs	0 80—0 85	12 00 pr. ton.	.....	20 00 pr ton.
Meadow Grass,	70— 80	.....	.....	.....
Hemp, American dry rot, ton,	175 00–	6— 7	130 —140	.....
Hops, first sort, 1836, lb	9— 00	— 9	— 10	6— 8
Plaster Paris, per ton,	3 25—3 37½	0 00—3 50	2 50—	3 00—3 25
SEEDS—Cloverseed, per bushel,	4 75—6 50	6 00—7 00	.....	14— 15
Flaxseed, rough, do	1 40—1 41	1 37—1 50	8 50—9 50	.....
Timothy,	2 00—3 25	3 25—4 00	12 50–14 00	2 87—3 00
Tallow, per lb	11— 11½	— 10	— 11	11— 12
WOOL—Saxony, fleece, per lb	00— 00	40— 50	50— 00	50— 55
Merino,	46— 48	35— 40	37— 00	45— 47
1-4 and common,	33— 36	25— 30	40— 50	33— 38

Prices of Marketing as near the average as can well be ascertained.

Beef, - -	7½ a 8 by the quarter.	Potatoes, - -	- 40 a 50 per bu.
Pork, country killed,	- - 6 a 8	Sweet Potatoes, -	75 a 1 00 per bu.
Veal, - -	6 a 8 cents per lb.	Apples, - -	50 do.
Mutton, - -	- - 6 a 8	Dried Apples, -	1 50 a 1 75 do.
Dried Beef -	12½ a 15 per lb.	Dried Peaches, -	- 4 00 do.
Turkeys, - -	$1 12½ a 1 25 apiece.	Cider, - -	a 3 00 per barrel.
Chickens, - -	75 a 1 50 per pair.	Lard, - -	- 14 a 16 per lb.
Geese, - -	1 00 a 1 25 a piece.	Hams, - -	- 16 do.
Ducks, - -	75 a 1 25 a pair.	Shoulders, -	- 12½ do.
Butter, - -	- 2 5a 38 per lb.	Oak Wood, -	- 5 25 a 6 00
Eggs, - -	- a 18 per doz.	Hickory Wood, -	- 6 50 a 7 50

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